II. CLAIMS

1. (Previously Presented) A method for tuning a complex filter, the filter having at least one variable time constant by which the location of at least one pass band of the filter can be changed, wherein in the tuning, at least one reference signal comprising an in-phase component and a quadrature phase component is input in the filter, and at least one of the following steps is taken:

changing the frequency of said at least one reference signal,

changing said at least one time constant of the filter, and

wherein the method further comprises the steps of measuring the strength of the output signal of the filter without converting the signal into another frequency before the measurement, and determining, on the basis of the measurement on the strength of the output signal of the filter, the location of the pass band of said filter.

2. (Original) The method according to claim 1, wherein, on the basis of measurements, at least one maximum point is searched for the strength of the output signal.

3. (Original) The method according to claim 2, wherein the frequency of said reference signal is changed, until at least one maximum point is found, wherein the frequency of said reference signal at said maximum point indicates the location of the pass band of the filter.

4. (Original) The method according to claim 2, wherein at least one time constant of the filter is changed, until at least one maximum point is found, wherein the frequency of said reference signal and said time constant at said maximum point indicate the location of the pass band of the filter.

5. (Original) The method according to claim 1, wherein the tuning of the filter is performed automatically.

6. (Original) The method according to claim 5, wherein the tuning of the filter is performed at intervals.

7. (Cancelled)

8. (Previously Presented) A complex filter comprising at least one variable time constant by which the location of at least one pass band of said filter can be changed, wherein the filter comprises means for inputting at least one reference signal in the filter, and means for measuring the strength of the output signal of the filter comprising an in-phase component and a quadrature phase component, wherein the location of the pass band of said filter is arranged to be determined on the basis of the measurement of the strength of the output signal of the filter without converting the signal into another frequency before the measurement.

9. (Cancelled)

10. (Previously Presented) An electronic device which comprises at least one complex filter comprising at least one variable time constant by which the location of the pass band

of said at least one filter can be changed, wherein the electronic device further comprises means for inputting at least one reference signal in said filter comprising an in-phase component and a quadrature phase component, means for changing the frequency ratio between said reference signal and said at least one time constant, and means for measuring the strength of the output signal of the filter, without converting the signal into another frequency before the measurement, at different frequency ratios between said reference signal and said at least one time constant, wherein the location of the pass band of said filter is arranged to be determined on the basis of the measurement of the strength of the output signal of the filter and the frequency ratio between said reference signal and said at least one time constant.

11. (Original) The electronic device according to claim 10, wherein it comprises means for searching a maximum point for at least one output signal on the basis of the measurements.

12. (Original) The electronic device according to claim 11, wherein it comprises means for changing the frequency of said reference signal for searching at least one maximum point, wherein the frequency of said reference signal at said maximum point indicates the location of the pass band of the filter.

13. (Original) The electronic device according to claim 11, wherein it comprises means for changing the time constant of said at least one filter for searching at least one maximum point, wherein the frequency of said reference signal and said time constant at said maximum point indicate the location of the pass band of the filter.

14. (Original) The electronic device according to claim 13, wherein the means for changing the time constant of said at least one filter comprise an adjustable capacitor.

15. (Original) The electronic device according to claim 13, wherein the means for changing the time constant of said at least one filter comprise at least one capacitor, and selection means for connecting said at least one capacitor in a disconnectable manner to said time constant of the filter.

16. (Original) The electronic device according to claim 10, wherein it comprises means for tuning the filter automatically.

17. (Original) The electronic device according to claim 16, wherein the means for tuning the filter automatically comprise means for tuning the filter at intervals.

18. (Cancelled)

19. (Previously Presented) A wireless communication device which comprises at least one complex filter comprising at least one variable time constant by which the location of the pass band of said at least one filter can be changed, wherein the wireless communication device further comprises means for inputting at least one reference signal in said filter comprising an in-phase component and a quadrature phase component, means for changing the frequency ratio between said reference signal and said at least one time constant, and means for measuring the strength of the output signal of the filter, without converting the signal into another frequency before the measurement, at different frequency ratios between

said reference signal and said at least one time constant, wherein the location of the pass band of said filter is arranged to be determined on the basis of the measurement of the strength of the output signal of the filter and the frequency ratio between said reference signal and said at least one time constant.

20. (Cancelled)